

# *CALIFORNIA HIGH-SPEED RAIL: BUSINESS PLAN PRESENTATION*



November 3, 2011

# Introduction

## Central tenets of business plan:

- Ridership forecasts re-modeled and re-evaluated; international peer review undertaken
- Updated capital and operating costs with conservative assumptions
- Reassessment of operating performance
- Risks and mitigation plans identified
- A realistic appraisal of when and how private capital could be available
- Reassessment of federal and state funding
- Development of phased, transparent and executable plan

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# Introduction

## Updates since 2009:

- Better information on site conditions, alignments and potential impacts
- Update of capital costs and extension of planned schedule
- Definition of a phased development strategy
- Collaboration with regional rail partners and incorporation of a “blended approach” to urban areas
- Business model defined
- Independent peer reviews confirmed ridership model
- Plan requires no operating subsidies
- Secured federal funding for ICS
- Options for future public funding and private financing identified
- Frequently asked questions and criticisms considered and addressed

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# The Need

- Transportation systems already overburdened
- Population growth will create even more demand
- Major investments must be made
- HSR is the lower cost, more environmentally responsible choice

Transportation Alternative	Added Capacity	Required Investment (2010\$)	Required Investment (YOE \$, through 2033)
High Speed Rail	Phase 1, San Francisco to LA/Anaheim, 520 miles	65 billion	98 billion
Highways and Aviation	<ul style="list-style-type: none"><li>• 2,300 new miles of highway</li><li>• 115 new airport gates</li><li>• 4 new runways</li></ul>	114 billion	171 billion

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# Phasing of System

Step 1 - Initial Construction Section

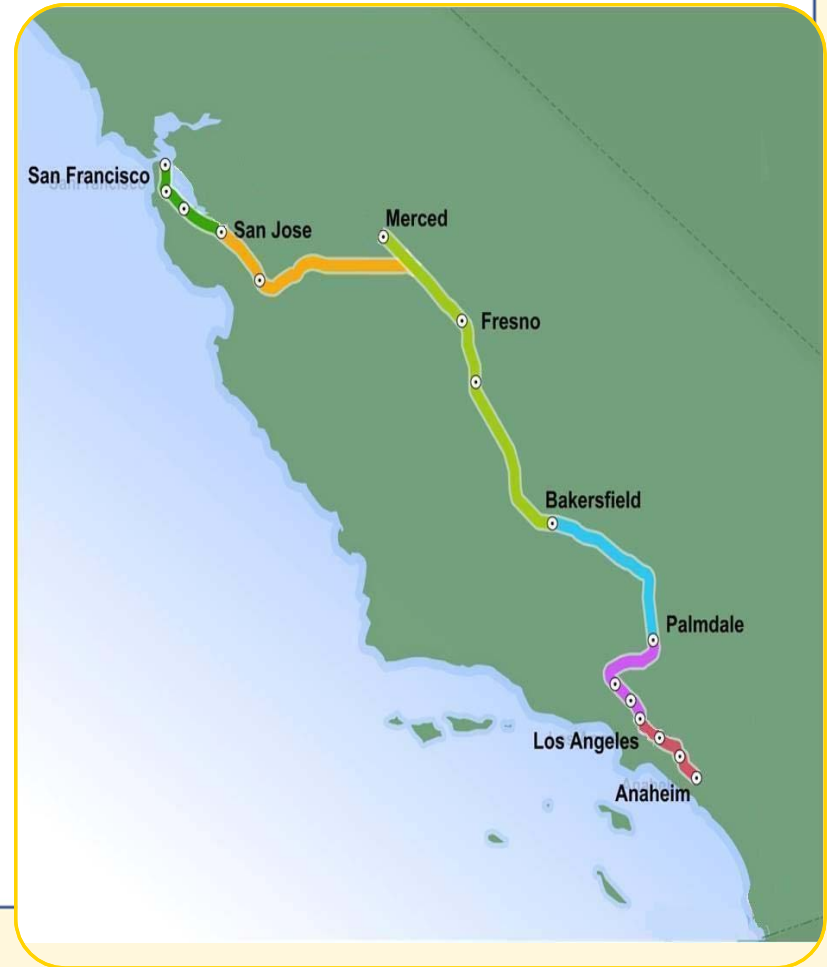
Step 2 – Initial Operating Section (N or S) / blended operations

Step 3 – Bay to Basin (B2B)

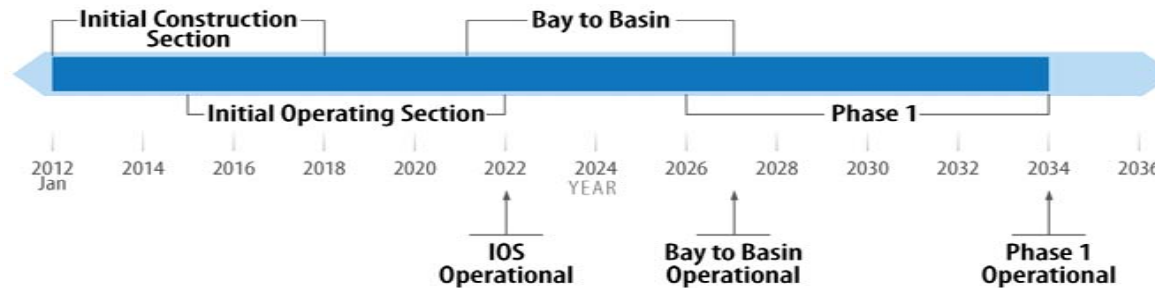
Step 4 – Phase 1 Blended

Step 5 – Phase 1/Full HSR

Step 6 – Phase 2



# Construction Schedule and Costs



\$ billions	ICS	IOS	Bay to Basin	Phase 1 - Blended Operations	Phase 1 / Full HSR
2010 \$	\$5.2	\$21.4	\$14.2	\$14.1	\$10.5
Cumulative	\$5.2	\$26.6	\$40.8	\$54.9	\$65.4
YOE \$	\$6.0	\$27.2	\$21.1	\$23.9	\$19.9
Cumulative	\$6.0	\$33.2	\$54.3	\$78.2	\$98.1

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# Construction Costs

- 80% plus of cost increase driven by route and stakeholder concerns
- Costs based on a good knowledge of the alignment to be constructed (15+% engineering).
- Estimate is conservative:
  - Cushion of 9-years in schedule
  - \$16 billion in contingency
  - \$27.5 billion for inflation

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# Business Model

## Governance



PUBLIC

- Ownership
- Safety/standards
- Contract supervision
- Other government agreements
- Right of way
- Environmental approvals

## Infrastructure Delivery



PRIVATE

- Signals & system integration
- Superstructure construction
- Substructure construction
- Build stations & depots

## Infrastructure Operations



PRIVATE

- Train dispatch/signaling
- Infrastructure maintenance and renewal
- Power provision
- Station O&M

## Train Operations



PRIVATE

- Passenger service
- Vehicle maintenance
- Vehicle procurement

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High-Speed Rail



# Ridership

- Ridership re-evaluated and peer-reviewed
- Conservative assumptions
  - Lower than official state population projections
  - Gas price at \$3.80 / gallon
  - SF / LA airfare at \$95 one-way
- Reduced by 15% for planning purposes
- Ramp-up of ridership over 5 years

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# Operating Profits

- High, medium and low scenarios generate operating profits, no operating subsidy needed

Year 2025	Ridership	Revenue	Operating Cost	Net Operating Profit	Operating Subsidy?
<b>IOS-South</b>					
High	10.8m	\$1,195	\$613	\$582	No
Medium	9.1m	\$1,002	\$539	\$464	No
Low	7.4m	\$810	\$458	\$352	No

Year 2025	Ridership	Revenue	Operating Cost	Net Operating Profit	Operating Subsidy?
<b>IOS-North</b>					
High	8.7m	\$904	\$537	\$367	No
Medium	7.3m	\$759	\$474	\$285	No
Low	5.9m	\$614	\$406	\$207	No

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# Revenue Breakeven

- System can withstand further reductions in ridership and breakeven - example for IOS South

Ridership Scenario	Percent of 2022 High Ridership		Percent of 2026 High Ridership	
	2022 Revenue	Revenue	2026 Revenue	Revenue
High	\$531	100%	\$1,450	100%
Medium	\$451	85%	\$1,214	84%
Low	\$370	70%	\$979	68%
Breakeven	\$218	41%	\$247	17%

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# Funding and Financing

- Federal, state, local and private sources
- ICS - State bond funds (\$2.7 billion); Federal grants (\$3.3 billion)
- Potential new Federal programs:
  - Trust fund
  - Availability payments
  - Qualified Tax Credit Bonds
- Completion of IOS - opportunity to access \$11 billion in private capital. Later phases also have private capital opportunities.
- Phased decisions allow the plan to commence section by section as funding is available

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# Economic Benefits

- Jobs creation – near term
  - 100,000 starting in 2012
  - 800,000-900,000 through Bay to Basin
- Jobs creation - long term
  - Based on various economic studies, experience internationally
  - 100,000-400,000 permanent jobs related to connecting economic centers, creating greater efficiencies
- Air quality
  - Reduction of 3.2 million tons CO2 emissions annually
- Traffic congestion
  - 146 million hours saved annually

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# Risks

- Key risks areas:

- Funding
- Ridership and revenue
- Cost and schedule
- Agreements and interfaces
- Staffing and organization

- Risk management strategies:

- Transfer risks where appropriate
- Phasing strategy
- Detailed planning
- Conservative assumptions
- Contingencies

## Changes Since 2009

This chapter explains the major differences between the Business Plan submitted in 2009 and the new 2012 Business Plan, making it easier for the readers to understand the differences.

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# FAQs

- Ridership
- Costs and schedule
- Subsidies
- Implementation
- Funding
- Private sector involvement
- Business model
- Integration with other transport systems
- Risk management
- Job creation and economic benefits
- Starting construction in Central Valley
- Management and Oversight

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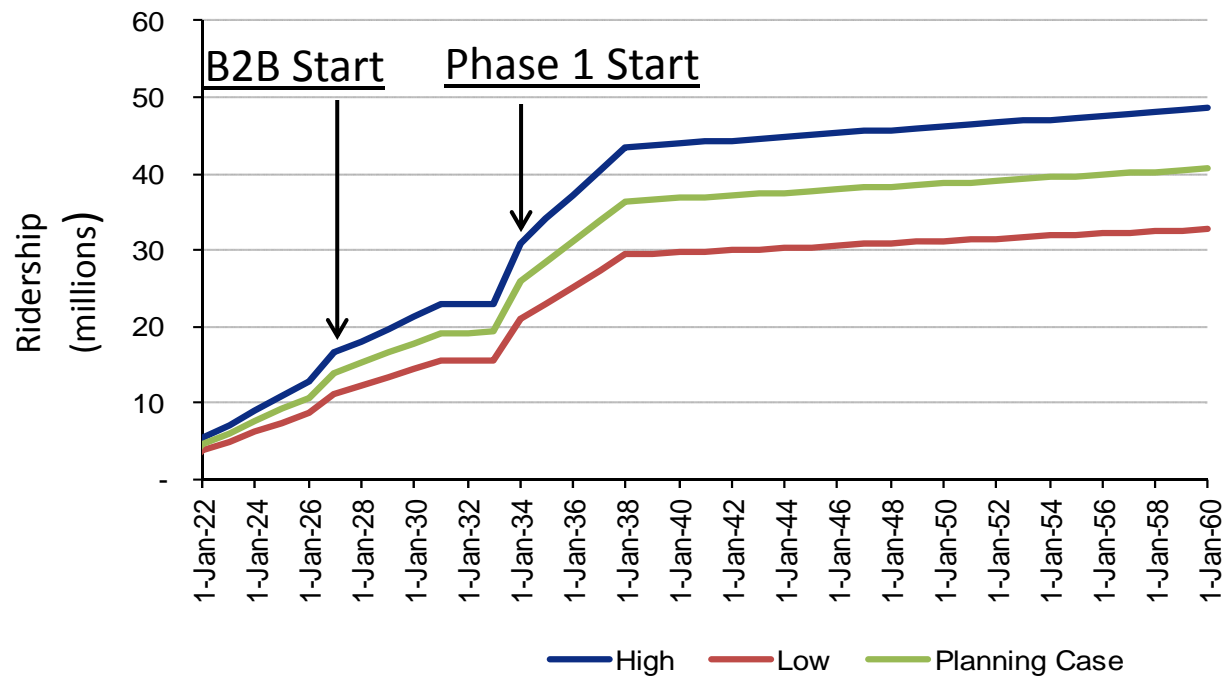
## Next Steps & Process

- 60-day review period
- Funding plan approval
- Public meeting(s)
- Legislative Hearings
- Finalize and release Business Plan – January 2012

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# SUPPORTING SLIDES

# Ridership



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•Q: **Ridership and revenue – what has changed?**

•A: Projected ridership in 2035 now in range from 29 to 43 million. Updated to reflect post-recession expectations for current and projected population, economic conditions, airline fares, and driving costs

•Q: **Capital costs – what has changed?**

•A: Estimate to complete phase 1 has increased to \$65-74 billion range (2010\$). Driven by changes in land use and availability; environmental impacts; stakeholder issues; and engineering conditions.

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